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ABSTRACT

This study described a program for reducing students' anxiety during testing. The targeted population consisted of seventh, eighth, and ninth grade students in public schools (three middle schools and a high school) located in a medium sized urban area in the Midwest. Evidence for the existence of the problem was based on student written responses regarding test anxiety and recorded teacher observations regarding students' behaviors during tests. Analysis of probably cause data revealed that students felt anxious and were unprepared for tests. The faculty was surveyed to report observed behavior regarding students' preparation for tests and anxiety during a test. Reviews of the instructional strategies indicated a need for improved study skills and test taking strategies. A review of the solution strategies suggested by knowledgeable others, combined with an analysis of the problem, resulted in the selection of three major categories of intervention: study skills, test taking strategies, and relaxation techniques. Of the 91 students in the 4 classrooms, 70 completed the assessments. The postintervention data reveal that in the area of self-esteem, students demonstrated that they were less anxious about how a teacher would respond to a lower test score. Students also felt that the clarity and organization of their thoughts increased while taking a test. The most meaningful change that students observed was the reduction of tenseness when they felt prepared for a test. Thirteen appendixes contain supplemental information, including student surveys. (Contains 3 figures, 3 tables, and 23 references.) (Author/SLD)

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INVESTIGATING WAYS TO REDUCE STUDENT ANXIETY DURING TESTING

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An Action Research Project Submitted to the Graduate Faculty of the

School of Education in Partial Fulfillment of the

Requirements for the Degree of Master of Arts in Teaching and Leadership

Saint Xavier University & IRI/Skylight

Field-Based Masters Program
Chicago, Illinois

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ABSTRACT

This study described a program for reducing students' anxiety during testing. The targeted population consisted of seventh, eighth, and ninth grade students in public schools located in a medium sized urban area in the Midwest. Evidence for the existence of the problem was based on student written responses regarding test anxiety and recorded teacher observations regarding students' behaviors during tests.

Analysis of probable cause data, revealed that students felt anxious and were unprepared for tests. The faculty was surveyed to report observed behavior regarding students' preparation for tests and anxiety during a test. Reviews of instructional strategies, indicated a need for improved study skills and test taking strategies.

A review of solution strategies suggested by knowledgeable others, combined with an analysis of the problem, resulted in the selection of three major categories of intervention: study skills, test taking strategies, and relaxation techniques.

The post-invention data revealed that in the area of self-esteem, students demonstrated that they were less anxious about how a teacher would respond to a low test score. Students also felt that the clarity and organization of their thoughts increased while taking a test. The most meaningful change that students observed was the reduction of tenseness when they felt prepared for the test.

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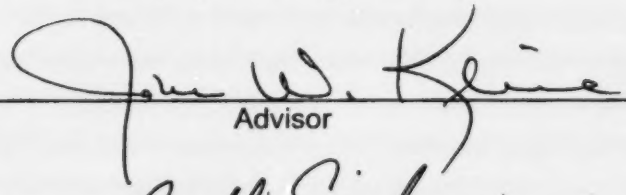

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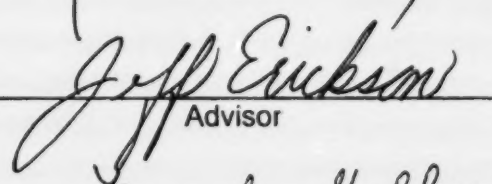

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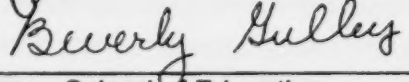

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CHAPTER 1

PROBLEM STATEMENT AND CONTEXT

General Statement of the Problem

The students of the targeted seventh through ninth grade regular division classes in four district schools exhibited anxiety when taking tests. Evidence for the existence of the problem included written students' responses regarding test anxiety and recorded teacher observations regarding students' behaviors during tests.

Immediate Problem Context

This research took place in three middle schools and one high school all of which were in the same district in an urban Midwestern setting. Much of the following information was obtained from the sites' school report cards.

Site A

The targeted middle school consisted of grades five through eight and was located in the western part of a medium-sized urban area in the Midwest. The brick building located on a pleasant nine-acre campus consists of two floors. There had been one addition to the building since its original construction in 1938. In 1961, seven rooms and one restroom were added. The area to one side of the building is asphalt, which is surrounded by fencing. The remaining

grounds were grassy areas. The school sign is located in front of the building. The building had sixteen full time classrooms in use and two part-time classrooms. Restrooms are located on both the first and second floors of the building.

The targeted classroom was located on the south end of the building on a split-level between the first and second floor. The classroom and adjoining lab are the only two rooms at this level and they are at the end of the hallway. Lab tables that seat two students were pushed together to form groups of four, with two separate tables each on the north and south walls. There were two extra tables at the front and back of the room bringing the seating capacity to 30. At the front of the room was an overhead projector, a podium on wheels, an overhead screen, and a chalkboard. A television, VCR, and laser disc player were on a cart that was also in the front of the room. The teacher's desk was located on the southwest side of the room. There were three inspirational posters on the front of the teacher's desk. Most of the south side of the room has windows overlooking a grassy and wooded area. Throughout the room there were five bulletin boards that displayed student work and general information. On a small wall area, there were two posters pertaining to the scientific method. There were two computers available for student use in the room, with only one connected to the Internet.

The population of the targeted school was 229 according to the 2000 School Report Card. Fifty-seven percent of the student population was Caucasian, 41% African American, 0.4% Hispanic, 1% Asian or Pacific Islander, and 0.4% Native American. The population was almost equally divided between boys and girls. Approximately 42% of the students rode the bus with the remaining students walking or using other transportation. The student mobility rate was 43.1%, which was higher than the district average of 36%. The student attendance rate was 93.2% compared to 93.9% in the district. The chronic truancy rate was 3.5% compared to 2.4%

for the school district. Of the students, 53.7% were from low-income homes. Fifty-five percent of the students either received free or reduced lunches while 45% paid for their lunches, which were prepared off site and delivered to the school (School Report Card, 2000).

The school was fully departmentalized, by subject, for most of the programs, with the exception of the special education students. The school day consisted of seven 50-minute periods and a 30-minute lunch period. Grades were reported to parents every nine weeks with mid-term notices sent after the first four weeks of each grading period.

According to school records, the school contained 12 regular division classrooms. Rooms for students with special needs included one fifth and sixth grade self-contained emotionally and mentally handicapped (EMH) classroom, one seventh and eighth grade self-contained behaviorally and emotionally disturbed (BED) classroom, one seventh and eighth self-contained EMH classroom, and one learning disabled (LD) resource classroom. Additional rooms were a science lab, a computer lab, a library, a cafeteria, and a gymnasium.

In addition to the twelve regular division classroom teachers, other full time staff included: a behavioral attendant, a teacher assistant, a library manager, a head custodian, a night custodian, and a secretary. Part-time staff included: a physical therapist, a speech pathologist, a nurse, a campus policeman, three cafeteria workers, and a parent helper. There was also a BED support team for students and staff, which consisted of a social worker, a coordinator, and an EMH and resource team. The team consisted of a coordinator, social worker, and a psychologist. The administrative staff consisted of a principal. The racial and ethnic composition of the staff was 89% Caucasian and 11% African American. Eighty-three percent of the staff was female, and 17% was male. The average age of the staff was 46. The average number of years teaching

was 18 and ranged from 2 – 35 years. Fifty-six percent of the staff had a master's degree or higher (Targeted School Records, 2001).

The targeted school's mission statement read as follows:

> Our mission is to create a safe, nurturing environment for learning. This environment will provide for students from diverse backgrounds and with a variety of learning styles. It will allow students to reach their potential physically, socially, emotionally, and intellectually. All students will be afforded the opportunity to develop their unique talents through authentic life experiences and a curriculum, which challenges them to think critically and creatively. As a result of these efforts, our students will acquire the skills necessary to be life-long learners and pursue appropriate career pathways (School Achievement Plan, 2001).

The targeted school and local community had implemented several programs that enhanced student behavior and academic progress. Incentives were given by local businesses to recognize student achievement. Fifth grade students participated in the Drug Awareness and Resistance Education (D.A.R.E.) program and sixth grade students participated in the Gang Resistance Education and Training (G.R.E.A.T.) program offered by local law enforcement. Bring Up Grades (B.U.G.) identified students that improved their overall grade point average from the previous grading period. Honor roll certificates were issued by the office for grades received during a nine week grading period.

Other academic programs included a study club, Math Counts Club, Scholar's Cup, Scholastic Bowl, Young Authors, Rebecca Caudill Reading Program, Accelerated Reader programs, Lightspan, and tutoring. During the school day, the staff offered exploratory classes

such as, fine arts, health, and computers on a six-week rotational basis. Programs were offered for students who had been identified through testing and recommendations as being gifted.

Additional student activities included drama productions, a local newspaper spelling bee, spirit weeks, student council, student newspaper, student dances, student safety patrol, yearbook staff, library assistants, and school store volunteers. Intramural sports programs included softball, basketball, volleyball, and track.

Other programs offered by the targeted school were the latch key program and Project Success. The after school latchkey program was free to its families due to a grant. Project Success was also offered to families as a violence prevention program. This program offered community resources and services to the targeted school. The funding for these programs had been made available through a three-year grant. Project Success included the Support Team (S-Team), Second Step (a problem solving and anger management program), Botvin Life Skills, and Families and Schools Together (F.A.S.T.), a program that promoted family involvement in school academics.

The targeted site received support from its community. It had an active Parent-Teacher Organization (P.T.O.) with 53 members and two adopt-a school partners. The P.T.O. met on a regular basis and supported the school in many endeavors. The adopt-a-school partners teamed with the school and offered opportunities throughout the year to the school that otherwise would not have been available, thus enriching student experiences. The school published monthly newsletters that were mailed to parents, informing them of upcoming events and giving recognition to past achievements. The school also received tutoring and mentoring services from the community and from the nearby college students (Targeted School Records, 2001).

Site B

The targeted middle school was comprised of grades five through eight. This site is located in the north part of the city. The school is a one-story brick building. There have been two additions to this building since its original construction in 1957. The first addition in 1970, included a library, three classrooms, and a wheelchair ramp. In 1974, a second addition to the building was made that incorporated a gymnasium and science lab. The technology center and science lab were renovated in 1998, which added doors and windows to connect the technology center to the computer lab and the science lab to a classroom. There is a parking lot and driveway located in the front and back of the building, as well as, grassy areas on both the east and west sides of the school. The building contained 20 classrooms.

The classroom at this site was located in the main hallway to the right of the office. It was the last room before the wheelchair ramp. The students' desks were arranged in five rows. To the south are three large windows facing the back parking lot. The teacher's desk was located in the southeast corner of the classroom. The front of the class included a large chalkboard, overhead screen, and small bulletin boards on both sides. The overhead projector and podium were also positioned in the front of the classroom. The back of the room had a large chalkboard and one bulletin board. The computer, with Internet accessibility, and television with a VCR stand were next to the chalkboard.

The school population was made up of 337 students. Of these students 74.9% were Caucasian, 18.9% African American, 0.7% Hispanic, and 5.5% Asian or Pacific Islander. The student mobility rate was 17.3%. Student attendance rate was 95.3%, and chronic truancy rate was 0.4%. Eighteen and six-tenths of a percent of the students from this site were considered low income (School Report Card, 2000).

This school was fully departmentalized, by subject, with the exception of the special education students. The school day was made up of seven 50-minute periods and a 30-minute lunch. The core subjects taught at this site were language arts, reading, English, science, mathematics, and social studies. Other subjects included orchestra, band, chorus, physical education, computers, art, vocal music, and seventh and eighth grade French class. Grades were reported every nine weeks, and mid-term notices were sent home every fourth week of the grading period.

Since this school is a one-story building and handicap accessible, many of the 20 classrooms were used for students with special needs. Two classrooms were self-contained special education centers; two classrooms were used for students with physical disabilities; and two classrooms were used for students who needed special education resource. The site also included one music room, a cafeteria that also served as a small gym, an office, a computer lab, a faculty lounge, and technology center.

The school had a total of 48 staff members, 23% were male and 77% were female. The ethnic background of the staff was 74.9% Caucasian, 18.9% African American, 0.7% Hispanic, and 5.5% Asian or Pacific Islander. Eighty percent of the teaching staff had a master's degree. The average teaching experience among the full time teaching staff was 20 years. The office staff included a principal, full and part-time secretary, and a part-time nurse. In addition to the classroom teachers, there was a physical therapist, three special education aides, two part-time speech pathologists, a part-time counseling intern, a librarian, two custodians, three cafeteria workers, and several parent volunteers (School Report Card, 2000).

The school's vision statement read:

> This school is committed to the development of our students as responsible citizens, lifelong learners, and leaders for the future. Through the cooperation of school, home, and community, we strive to work together in a way that recognizes, nurtures, and challenges the unique intellectual, social, physical and creative potential of every student. Students are encouraged to broaden their perspective in order to understand and appreciate diversity within the school as well as cultures and conditions beyond those of their local community. A positive, caring, and productive learning environment encourages students to actively engage in a learning process within an enriched and challenging curriculum (Student Achievement Plan, 2000).

This school encouraged positive student behavior and achievement with several programs. The fifth grade students participated in the Drug Awareness and Resistance Education (D.A.R.E.) program. This site also identified students who Bring Up Grades (B.U.G.) and honor roll certificates were issued. Each month one student from each grade level was selected as Student of the Month.

Other academic programs included Math Study Club, Odyssey of the Mind, Math Counts Club, Scholar's Cup, Scholastic Bowl, weather program, Young Authors, and Accelerated Reader. There were also several athletic programs offered for both boys and girls. The targeted school offered boys and girls basketball, track, and softball. Seventh and eighth grade girls also participated in cheerleading and volleyball. Additional student activities included: spelling bee, drama, student council, volunteer recycling assistants, and library assistants. Site B had a parent-teacher organization that met on a regular basis. They informed parents of upcoming events. They also supported the school by donating items that helped to improve instruction.

Site C

Site C housed students in grades five through eight in a building located on a major thoroughfare in the west central section of the city. The brick structure, which was built in four different phases, 1914, 1948, 1958, and 1990, sits on approximately six acres of land. The building faces one of the busiest streets in the city. There are many entrances to the building that were kept locked for security. The building had 26 classrooms, two gymnasiums, and a computer lab with 30 computers. There was also a library at the center of the building that was easily accessible by the students.

The targeted classroom was located on the top floor of the north end in the newest section. It was the largest room in this area of the building and was used for reading and language arts instruction. During the day, students were sent to this room, which also served as a timeout area. A chalkboard and two bulletin boards were in the room.

Posted throughout the room were many instructional posters that students referred to when completing the writing process. A television set on a large stand, an overhead projector, a telephone, and three computers which were wired to the Internet, were in the room. The teacher's desk sat in the northwest corner in front of the window. There was a large table used for group work and meetings. Desks in the room were arranged in nine groups of three to encourage cooperative learning. There was no clock in the room.

In this building, the fifth grade classes were self-contained except for Success For All reading which was divided homogeneously and met for ninety minutes each morning. Students in grades six, seven, and eight were departmentalized by subject. There were three special education classrooms that were self-contained. Students from these rooms were included in regular division vocal music, physical education, and art. Some special education students

from the self-contained rooms, left the classroom for other instruction in academic classes, such as science and Spanish. There were some rooms that were special ed inclusion classrooms.

The targeted school was in a partnership with a private company. Because of this, the length of the school day, curriculum, and organization of the school was different from most schools in the district. The school day began at 7:30 a.m. and ended at 3:00 p.m. Each day was divided into eight – fifty minute class periods with three - thirty minute lunch hours. Block scheduling was used for sixth, seventh, and eighth grade science and social studies classes, as well as, all grades in art, vocal music, and physical education. All students in the school received Spanish, and ninety minutes of art, physical education, or vocal music each day. Two special education classes participated one morning a month volunteering at a local service agency.

An administrative staff of a principal and junior academy director led the school. There were twenty full time classroom teachers, three self-contained special education teachers, and three special education teachers who worked with inclusion and Wilson Reading, three physical education teachers, two full time and one part-time music teacher, two art teachers, and one part-time speech clinician. The ethnic composition of the staff was 81% Caucasian, 11% African American, and 8% all others. Seventy-one percent of the staff was female while 29% was male. The average age of the staff was 28 years. Staff experience ranged from 1 – 18 years with the average being five years. Fifteen percent of the staff had a master's degree.

Administrators, teachers, and support staff comprised three major committees that governed the school. The Lead Team met weekly and helped decide policies, procedures, and programs implemented in the school. The Student Achievement Plan (SAP) committee met in the spring and wrote goals that would help teachers improve student achievement. The

Families and Student Support Team (F.A.S.S.T.) met weekly, identifying students at risk, planning interventions, and meeting with students and parents.

Each teacher taught six classes a day. One fifty-minute period was spent in team time, planning lessons, receiving technology lessons and updates, studying educational issues, meeting with parents and students, and working with other areas that concerned the team. Each teacher also received a fifty-minute plan period. The school year was twenty days longer than the targeted district's middle schools.

In addition to the teaching staff, there was a library manager, two teacher's assistants, a campus security guard, one full time secretary and a part-time secretary that was hired from the high school business academy, three full time custodians, a cafeteria manager and six cafeteria workers. Staff hired, in partnership with the private company, was a full time partner technology director, two User Service Technicians (UST), a full time Technology Systems Manager TSM), a Business Service Manager (BSM), and a Student Services Manager (SSM). The faculty and staff actively supported programs that involved the students, in addition to, volunteering within the community.

Groups that helped with the education of the students: were the Parent Teacher Organization (P.T.O.), who purchased items for the school, and a farm league baseball team, a local semi-pro hockey team, and a university that provided free tickets to sporting events for honor roll students. Teachers had written grants to support programs in the school. Every month a local mall honored a student of the month from each grade. Students were also eligible to participate in and had won college scholarships from the local mall. A national food chain supplies food coupons for awards and a local restaurant had provided food for special events sponsored by the school.

Students in the district, who resided south of a set boundary, could apply to attend this school. Students fed into all of the high schools in the city and represented the economic areas from public to middle income housing. According to the secretary's records, the population was 490 students. Seventy-eight percent of the population was African American, 19% Caucasian, 1% Hispanic, 1% Asian, and 1% other. The population was divided almost equally between male and female. Student mobility rate was 6.4%. Eighty-three percent of the students received free lunches, 12% were self pay, and 4 % were reduced pay. The daily absentee and tardy rate both stood at 15%. These figures helped the school to be eligible for Title I funds (Targeted School Records, 2001).

There were many opportunities for students to participate in clubs or activities. Sporting teams were boys and girls softball, basketball, and track, and a girls volleyball team. These teams competed against other middle school teams in the city. There was a varsity and junior varsity cheerleading squad that cheered for the basketball season. The school had intramural floor hockey teams that competed within the school. Academic teams students could choose to be active in were Math Counts and Scholar's Cup. Fifth grade students were instructed in Drug Awareness and Resistance Education (D.A.R.E.). Eighth grade students could join Writer's Workshop. Students had the opportunity to write a school newspaper twice a year. They also participated in the Young Authors program and entered various writing contests throughout the year. For fifth grade students there was an after school tutoring program for reading.

The school's mission statement read: "Our mission is to provide a safe learning environment, which meets the educational needs of our students and enables them to develop their individual strengths" (Student Achievement Plan, 2000).

Site D

The targeted high school is the oldest continuously operating high school in the state. Established in 1856, it had three prior locations before moving in 1916, to its present location in the heart of the city. Included within the five acres of land, stands the four-floor, brick building with large pillars and stone lions gracing the entrance. The building includes an annex to the rear, as well as, a science wing and gymnasium added in 1962. The gymnasium also includes the boys' physical education wing. The Air Force Junior Reserve Officers' Training Corps (AFJROTC) area has taken over the original auto shop. Across the street, is another building that housed an indoor pool dedicated in 1969. An extensive renovation to the auditorium was scheduled to be completed by spring of 2001. A football field and track are located behind the school, and tennis courts are located on the northwest corner of the campus. The inside of the building was totally repainted in 2000. The business academy was located in the rear annex. Rooms were grouped by department in so far as is possible. The front hall of the school featured an ornamental frieze, a replica of the Acropolis in Greece, that was part of the 1861 building. Memorials to students killed in the Civil War, World War I and II appeared in the front hallway. A tribute to valedictorians and salutatorians also appeared in the main hall. Various trophy cases were placed throughout the school. Bright maroon lockers lined the halls where classrooms were located. Bright flags and banners were suspended in the hallways to add color.

The targeted high school classroom was located on the third floor in the southeast corner of the building. Windows overlooking the front made up one wall. Bright colored posters with various sayings, both humorous and thought provoking, appeared on the other three walls. Two walls contained chalkboards. Thirty-one student desks and a teacher's desk were arranged within the room. The design changed every grading

period to give students different perspectives. A computer with Internet access and printer used by both teacher and students was located behind the teacher's desk. There was a large worktable at the rear of the room with two chairs. Beside the door, was a small bookcase with additional text books and current copies of five national news magazines for student use. A movie screen was suspended above the chalkboard. An overhead projector sat on a small table beside the teacher's desk. Another small table and chair along with a wooden podium were located at the front of the room for use in presentations.

The population of the targeted school was 927 according to the 2000 School Report Card. Forty-four percent of the student population was Caucasian, 52.6% African American, 1.3% Hispanic, 1.8% Asian or Pacific Islander, and 0.1% Native American. The student mobility rate was 34.3%. The attendance rate was 92% with chronic truancies averaging 14.1%. Of the students, 32.2% were from low-income homes with 8.6% dropping out. The average class size was 15.8 students (School Report Card, 2000).

Departments covered in the targeted school included: English, science, mathematics, social studies, physical education, foreign language, vocal and instrumental music, art, drama, business, and special education. Special programs like AFJROTC and early childhood classes were also offered. The school's business academy was open students from throughout the district. Weighted grades provided greater rewards for students in enriched courses. Advanced placement courses in English, mathematics, social studies, and foreign language were currently being offered. Special education classes for challenged students included a self-contained behaviorally and emotionally disturbed (BED) room and a learning disabled (LD) resource room. Orthopedic classes were also available. According to school records, there were 62 classrooms,

6 computer labs, 2 gymnasiums, a library, an auditorium, a foyer, and a cafeteria (Targeted School Records, 2000).

The school day consisted of six 55-minute periods and three 30-minute lunch periods. Grades were reported every six weeks with mid-term notices sent at 9 and 27 weeks. The first and last report cards were mailed.

The faculty consisted of 63 full time teachers, 6 part-time teachers, and 2 military officers. The staff included: library manager, audio-visual manager, psychologist, social worker, speech pathologist, physical trainer, school nurse, and teacher's assistants. Support staff included: cafeteria workers, custodial staff, security guards, and clerical staff. The administrative staff was one principal, one assistant principal, two deans, four counselors, and two part-time activity directors. The racial and ethnic composition of the faculty was 96% Caucasian, 3% African American, and 1% Hispanic. Forty-nine percent of the teachers were female with 51% male. Fifty-seven percent of the teachers had a master's degree or doctorate (Targeted School Records, 2000).

The targeted high school's mission statement read:

> Our belief is that all students can learn. Our primary purpose is to serve the individual student's ever changing educational needs. Site D will provide a community-linked, secure environment conducive to quality teaching and learning. Responsible and effective use of resources will provide challenging opportunities for academic, extra-curricular, and athletic experiences for all students (Student Achievement Plan, 2000).

A variety of activities, both academic and athletic, were available to the students. The state high school association sponsored male and female competitions. Athletics included:

football, soccer, basketball, baseball, softball, swimming, wrestling, volleyball, track, cross-country, and tennis. Scholastic Bowl and speech team, along with vocal and instrumental music also competed. Non-competitive intramural activities, including basketball and bowling were also available. Fine arts programs included jazz band, choral ensembles, and a spring musical production.

The targeted school had implemented several programs to enhance student behavior and academic progress. The Renaissance program was started to award academic improvement and excellence. Optional final exams for juniors and seniors improved attendance, tardies, behavioral problems, and academics. A Drug Awareness and Resistance Education (D.A.R.E.) program sponsored by local law-enforcement, was provided during freshman health classes. Honor roll certificates were presented by counselors to qualifying students. An honor roll banquet was held after the first semester. Parents, students, and teachers were invited. Other programs included tutoring for students during their study hall, at-risk student support groups, and a crisis intervention faculty group to help targeted students cope with personal and school concerns.

The targeted high school received support from the community. It had an Association of Parents and Teachers (APT), a booster club to support athletics, and a band and orchestra parent group. An alumnae association with a 29 person board, had over 2,000 dues paying members. The school also had four adopt-a-school partners. They offered a variety of opportunities for students and staff that would otherwise not be available. The school published a student newspaper several times a year, as well as, a newsletter that was sent home quarterly.

The Surrounding Community

Sites A, B, C, D

The targeted schools are located in a medium-sized urban area that had a population of 113,504 and consisted of 111.7 square kilometers area with an annual average temperature of 50.4 degrees Fahrenheit. Approximately 77% of the city's population was Caucasian, 21% African American, and the remaining 2% were American Indian, Eskimo, Aleut, Asian, Pacific Islander, or Hispanic. There were approximately 55 different church denominations in the city. There were approximately 45,000 households of which 26% had children under the age of 18 living in the home. The median income was $34,003 with 19% of the population living below the poverty level. Of the estimated 4,284 families living below the poverty level, 2,077 received public assistance income. The educational levels of the residents over the age of 25 were 77.9% with a high school diploma and 23.6% with a college degree (factfinder.census.gov, 2001).

The city of the targeted schools is the oldest civilized settlement in the state (Chamber of Commerce, 1999). It has productive farmland on three sides and is bordered on one side by a major river. The community had several major manufacturing businesses, three major hospitals, a major mental health facility, a retail mall, and several strip malls. Other important employers in the city included the school district of which the targeted schools are a part, a marketing company, an employee owned newspaper, an electric company, a medical school, and a private university. The city also had two major health clubs and a health education center. The city had a public library system with five branch locations. The city was a cultural center for the north central region of the state being home to Broadway Theater League, a symphonic orchestra, a ballet company, and a museum of the arts and sciences including a planetarium. The city's major media consisted of three television stations, and two newspapers, one of which was

employee owned. Recreation in the city included: a botanical garden, a zoo, a civic center, and five public golf courses run by a nationally recognized park district. Major sports in the city included: college level sports, professional baseball and hockey teams, and state, national and international competitions. Transportation included approximately nine highways in and around the city. In addition to personal transportation, alternative modes included: numerous taxi services, two bus lines, and an airport within minutes of the city.

The targeted school district served 15,134 students. It included 15 primary schools (grades K-4), 12 middle schools (grades 5-8), four high schools (grades 9-12), an alternative high school, a K–8 magnet school, a 5–8 gifted school, an adult education center, a developmental center, a school for severely handicapped students, and an early childhood education center. Of the four high schools, three provided special academy classes that train students for careers. The three high schools focused on health, business, and technology professions (District School Calendar, 2000-01).

According to the School Report Card, the total number of teachers in the district was 1,115 of which 21.8% were male and 78.2% were female. The racial and ethnic background of these teachers was 91.8% Caucasian, 7.1% African American, 0.6% Hispanic, and 0.4% Asian or Pacific Islander. The average teaching experience was 15 years. Approximately 52.9% of the teachers had a bachelor's degree, and 47% had a master's degree or above. The pupil-teacher ratio was 19:1 at the elementary level and the average class size for secondary was 14:1. The average teacher salary for the district was $40,881. The average administrator salary was $70,234. The operating expenditure per pupil was $7,490 and the district's total expenditure was $115,530,734 for the school year (School Report Card, 2000).

The racial and ethnic composition of the students in the district was 40.6% Caucasian, 55.2% African American, 2.2% Hispanic, 1.8% Asian or Pacific Islander, and 0.1% Native American. Approximately 60.3% of the students were considered low income. The targeted school district had 92.9% attendance and 36.0% mobility. Chronic truancy was 7.3% with 1,061 chronic truants (School Report Card, 2000).

The mission statement for the targeted district read: "Meet the changing educational needs of students and our community by providing quality learning opportunities which will equip all students to build educational foundations for lifelong success" (District School Achievement Plan, 2000).

National Context of the Problem

A continuing concern of educators today is students' ability to cope with anxiety during testing. Test anxiety is described as a nervousness or tension experienced before, during, or after an examination. Almost everyone experiences some form of anxiety. Some nervousness can help to motivate a person; however, too much of it can become a problem if it interferes with the ability to prepare for and perform on tests (Board of Trustees of the University of Illinois, 1984). A student graduating in 1990 had taken on the average nineteen standardized tests; whereas his counterpart in 1950 had taken only three (Andersen, 1993). Since the Andersen study, tests at almost every grade level have been mandated by federal, state, or district bodies. However, some testing is necessary in order to measure the skills and knowledge mastered by the students (Popham, 2001).

Researchers have consistently debated that test anxiety has two distinct components: worry and emotionality (Williams, 1996). Worry refers to the cognitive concerns about testing, while emotionality refers to the physiological effects (Friedman, 1997; McDonald, 2001;

Williams, 1996). In his book Emotional Intelligence, Daniel Goleman states, "pretest apprehension interferes with the clear thinking and memory necessary to study effectively, while during the test it disrupts the mental clarity essential for doing well" (1994, p.84). He also believes that, "Anxiety undermines the intellect" (1994, p.83).

Educational researchers believe that there is a certain need for continued research and development of programs that investigate ways to reduce student anxiety during testing. Studies have emphasized the importance of cognitive and physiological needs. Anxiety interventions currently being advocated that blend these two components may help in the reduction of test anxiety (Williams, 1996).

CHAPTER 2

PROBLEM DOCUMENTATION

Problem Evidence

Many people have exhibited some level of anxiety in their lives. A little nervousness may be motivating. However, when people have allowed the anxiety to become a problem, it has been known to affect their ability to work to their potential. Through classroom experiences the researchers had noticed student anxiety during testing. This was documented through teacher observations and student responses that some students became physically ill during testing. It was also noted that there was a correlation between high absenteeism and test dates. It was suspected through teacher and student comments that a lack of study skills and test preparation had led to the anxiety, which in some cases caused some not to work to their level of ability. Some students stressed they felt unorganized, unprepared, and tense. A variety of data collection tools were used to document the problem. Tools included: a teacher observation survey (Appendix K), three student surveys (Appendices A, L, M), and four student self-assessments (Appendices B, F, H, I).

Of the 91 students in the four classrooms, 70 completed the assessments. Due to a lack of returned parental consent forms, 21 students did not participate. All four project sites were involved in all of the assessments. Students' ability levels ranged from educationally gifted to students with Individualized Education Plans (IEP). Early in the study, students completed a

survey adopted from the "Friedben Test Anxiety Scale," that was administered twice during the first semester. This survey consisted of 23 questions that were divided into three categories: student self-esteem, anxiety during testing, and physical and mental anxiety.

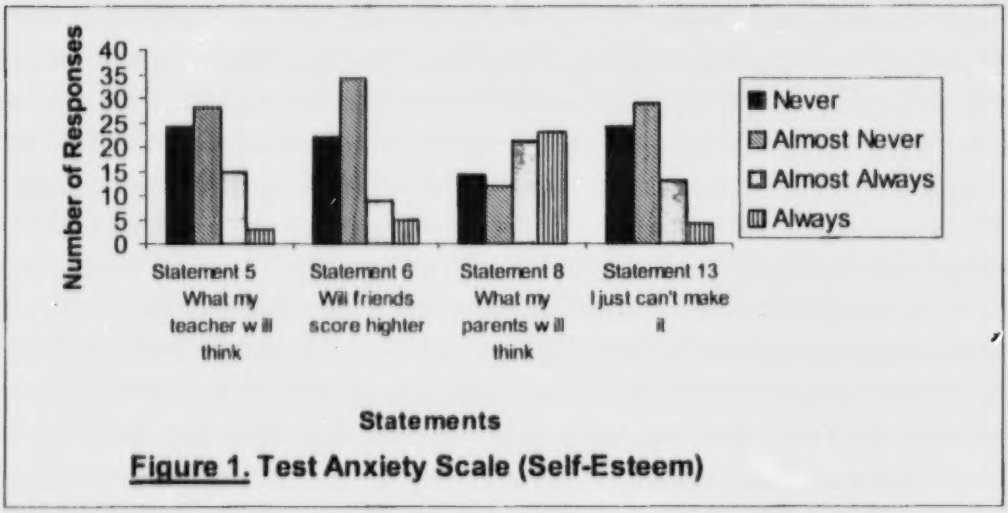

Figure 1. Test Anxiety Scale (Self-Esteem)

The teachers administered the "Test Anxiety Scale" (Appendix B) as a pretest measure to each student in the targeted groups. Students were asked to evaluate their responses in the three categories based on a Lickert Scale. A response indicated the student never, almost never, almost always, and always felt this anxiety. Statement five (Figure 1) stated: I am very worried about what my teacher will think or do if I fail his or her test. Twenty-four (34%) of the respondents said they never worried about what the teacher would think of them if they failed the test. Twenty-eight (40%) almost never worried; fifteen students (21%) almost always worried; and three students (5%) always worried about how the teacher would react to them failing a test. Statement six stated: I am worried that all my friends will get higher scores in the test, and I will get low ones. Twenty-two (31%) of the respondents said that they never worried that their friends would score higher on the test and that they would score lower. Thirty-four (49%)

almost never worried, nine (13%) almost always worried, and five (7%) always worried. Statement eight read: I am worried that if I fail a test my parents will not like it. Fourteen (20%) of the students reported they never were concerned their parents would have been upset if they failed a test. Twelve (17%) almost never; twenty-one (30%) almost always; and twenty-three (33%) always were concerned that their parents would be upset if they failed a test. Statement thirteen declared: I feel I just can't make it on tests. Twenty-four (34%) of the students indicated that they never felt that they could not make it on a test. Twenty-nine (41%) almost never; thirteen (19%) almost always; and four (6%) of the students responded they were always concerned they cannot make it on a test.

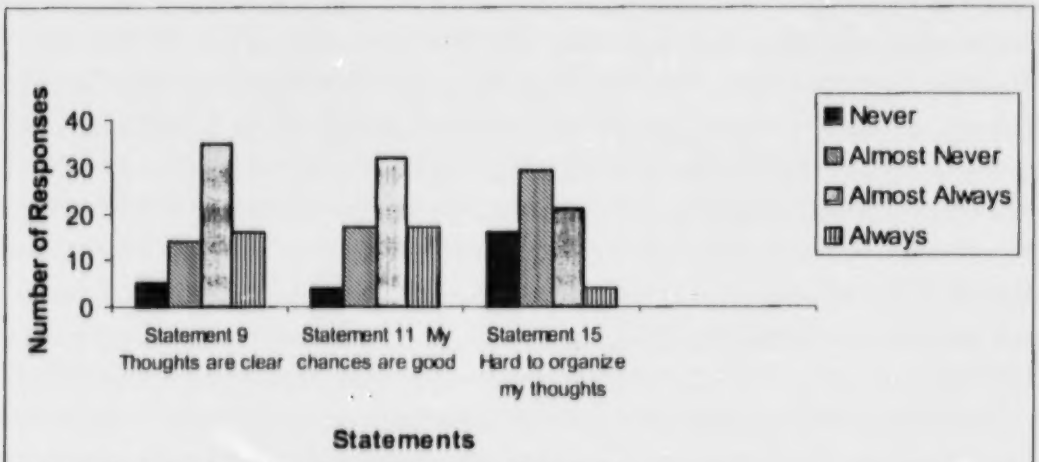

Figure 2. Test Anxiety Scale (During Testing)

The results of the "Test Anxiety Scale" that measured anxiety during testing is shown in Figure 2. Statement 9 read: During a test my thoughts are clear, and I neatly answer all questions. Five (7%) of the students felt they never had clear thoughts while taking a test. Fourteen (20%) felt they almost never had clear thoughts; 35 (50%) almost_always had clear thoughts; and 16 (23%) always had clear thoughts during a test. Statement 11 read: I feel my

chances are good to think and perform well on tests. Four students (6%) felt they never could think and perform well on a test; 17 students (24%) felt they almost never thought clearly and performed well; 32 students (46%) almost always felt they thought clearly and performed well; and 17 students (24%) always thought they could think clearly and perform well on a test. Statement 15 stated: During a test it's hard for me to organize what's in my head in an orderly fashion. Sixteen students (23%) felt they never had difficulty organizing their thoughts; 29 students (41%) almost never had difficulty; 21 students (30%) almost always had difficulty; and 4 students (6%) always had difficulty organizing thoughts during a test.

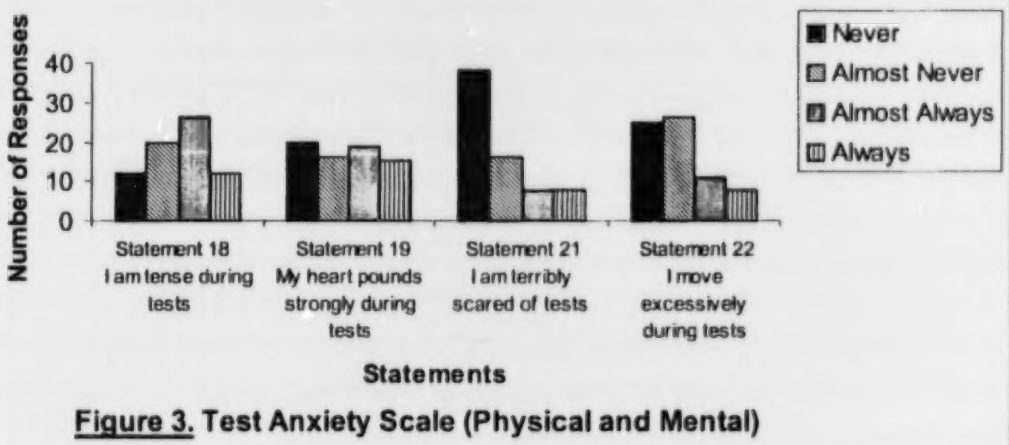

Figure 3. Test Anxiety Scale (Physical and Mental)

Responses regarding physical and mental anxiety experienced during testing are shown in Figure 3. Statement 18 read: I am very tense before a test, even if I am well prepared. Twelve students (17%) never felt tense before a test; 20 students (29%) almost never felt tense; 26 students (37%) almost always felt tense; and 12 students (17%) always felt tense before a test even if they were well prepared. Statement 19 stated: While I am taking an important test, I feel that my heart pounds strongly. Twenty students (29%) said they never felt their heart pound during a test; 16 students (23%) almost never felt their heart pound strongly; 19 students (27%)

almost always felt their heart pound strongly; and 15 students (21%) always felt their heart pound strongly during an important test. Statement 21 declared: I am terribly scared of tests. Thirty-eight students (55%) were never terribly scared of tests; 16 students (23 %) were almost never terribly scared; 8 students (11%) were almost always terribly scared; and 8 students (11%) were always terribly scared during a test. Statement 22 stated: During a test I keep moving uneasily in my chair. Twenty-five students (36%) said they never moved around uneasily during a test; 26 students (37%) almost never moved around uneasily; 11 students (16%) almost always moved around uneasily; and 8 students (11%) always moved around uneasily during a test.

When the researchers began their study, they believed that students did exhibit anxiety during testing. According to Table 1, "Attitude Toward Test Survey," (Appendix A) Seventy-four percent of the students responded that they sometimes were nervous when taking a test which corroborates the researchers' theories. Interpretation of students' attitudes toward taking tests communicated that 80% of the respondents wished they had fewer tests. The table also indicated that 77% of the students would rather do something else than take a test. The researchers determined that students would prefer a variety of assessments.

Table 1

Attitude Toward Test Survey

Questions	YES	NO
1. Taking a test is my favorite thing to do at school.	4%	96%
2 Sometimes I am nervous when I take a test.	74%	26%
3. I look forward to taking a test.	23%	77%
4. I dislike taking a test when I don't know the answers.	84%	16%
5. I wish we had fewer tests.	80%	20%
6. Taking a test is always fun.	7%	93%
7. I like tests even when I don't know the answers.	11%	89%
8. Taking a test is one of the worst things about school.	41%	59%
9. I would rather do something else besides take a test.	77%	23%
10. I wish we had more tests.	3%	97%

Another theory of the researchers' regarded test preparation and how it related to test anxiety. Researchers felt the lack of study and organizational skills had a direct impact on how a student approached and performed on a test. It was because of this belief that a teacher survey was distributed. In Sites A through C, all teachers were surveyed. At Site D only the teachers having freshmen classes were surveyed. Table 2, "Teacher Survey for Observed Test Anxiety," (Appendix K) indicated the results of the survey distributed to teachers. According to the survey, a majority of teachers agreed that students did not study for tests; they did not come to class prepared; and they had made comments expressing anxiety about test taking. Teachers surveyed confirmed the researchers' hypothesis.

Table 2

Teacher Survey for Observed Test Anxiety

Questions	YES	NO
1. Do you feel your students study for tests?	28%	72%
2. Do your students come to class prepared the day of the test?	29%	71%
3. Have students ever made comments that let you know they are anxious for a test?	81%	19%
4. Have you ever had a student become ill, cry, show anxiety before during a test?	57%	43%
5. Do you have students who are often absent the day of a test?	60%	40%
6. Have you ever had students become disruptive during a test because they are not prepared or are anxious?	64%	36%
7. Do your students have an allotted amount of time to complete a test?	79%	21%
8. Do students know when the test is going to be given?	100%	0%
9. Have you been specific about what the test will cover?	100%	0%
10. Are your students aware of the testing format?	95%	5%
11. Do you feel students who are organized do better on a test than students who have problems organizing themselves?	98%	2%
12. Do you feel students who do not perform well on a test have a poor self-image?	64%	36%

Problem Causes

Students felt that they were prepared for tests; however, in the teacher surveys at all four targeted schools, teachers indicated that they felt students do not study and are not prepared for a test. The teacher surveys also indicated that students had made comments that they were anxious about tests. Professional literature suggested that there are several probable causes for test anxiety. These causes can be placed into two categories, cognitive and emotional. Cognitive barriers identified by Spielberger and Vagg included students' inability to practice good study skills including organization and a lack of knowledge of good test-taking strategies. In the survey, teachers from all sites overwhelmingly agreed that students who are organized do better on tests. A second obstacle in student achievement is emotionality. This includes self, peer, and adult expectations, as well as maintaining good physical health and distinguishing various coping strategies during test-taking. At two of the sites with lower academic achievers, students were more concerned with peer pressure than parental pressure. However, at the two sites with higher academic ability levels, parental pressure was more prevalent.

"Test-anxious students tend to have poor study habits and inadequate test-taking skills" (Spielberger & Vagg, 1995, p. 212). Due to students' inability to organize information for recall, they may exhibit higher levels of anxiety (Nealey & Host, 1992). Often students do not know how to devise a plan to use for studying and are unorganized when they come to the test, which can result in lower test scores. In order to perform well on a test, a student needs to develop effective strategies for reading, learning, and studying. Two basic components of studying are knowing what to study and how to study. Since students' learning is unique, a variety of study strategies should be presented. Research has shown that studying is an essential life skill, and

that by using these strategies, they are developing techniques that they can apply to their adult lives (Lenski, Wham, & Johns, 1999).

Students are more likely to be comfortable and relaxed during a test when they have greater confidence in their test-taking skills (Syncamore & Corey, 1990). Research literature supported that strategies for taking a test can be divided into two categories, special instruction in preparing for and special instruction in taking a test (Lenski, Wham, & Johns, 1999). A student who lacks skills in either strategy has more test anxiety. Students who master test-taking strategies can transfer the skills to all testing situations (Syncamore & Corey, 1990).

The second category for probable test anxiety is emotionality. "Emotionality is the physiological component of test anxiety, and can manifest itself as muscle tension, elevated heart rate, sweating, feeling sick and shaking" (McDonald, 2001, p. 91). In surveys conducted at the four sites, almost half of the students stated that their heart pounded strongly when they were taking a test. Over half of the teachers in the teacher surveys said they had observed students cry, become ill, show anxiety, or become disruptive during a test. Teachers also stated that students are often absent the day of the test. Students' past experiences and beliefs can shape their development of test anxiety (McDonald, 2001). A multitude of factors may mold students' reactions to test-taking situations. Some included: students setting standards too high, students becoming too easily frustrated, students' fear of being negatively evaluated, students' uncertainty of test expectations, and students' fear of how to best approach a test (Scruggs & Mastropieri, 1992).

As students progress through the educational system, they experience more testing situations. According to research, frequency of testing and testing at a younger age have been shown to increase test anxiety. In surveys conducted with students, the majority from all four

sites felt nervous when they took a test, wished they did not have as many tests, and would rather be assessed by some other method than a test. With greater expectations come parental and school pressures to perform well; that may become internalized in the student. Competition with peers in class has been known to increase test anxiety. A student who does not do well in school may begin to experience a lack of confidence and low self-esteem (Paris, Lawton, Turner, & Roth, 1991). The level of anxiety a student exhibits during a test directly forecasts how they will perform. Students' mental clarity was disrupted when they became preoccupied by worries during testing (Goleman, 1995). Typically, common fear levels decrease with age while evaluation and academic fears do not (McDonald, 2001).

Less successful students feel powerless to control their success in school. They often feel victimized by tests that validate their low performance (Paris, Lawton, Turner, & Roth, 1991). Even though it has been thought that high achievers experience less anxiety, unrealistic parental, peer, and self-imposed expectations have been known to increase their levels of apprehension (Williams, 1996). Therefore, research has shown that anxiety exists at all levels of academic performance.

Evaluation of the target schools has shown that there are two components of anxiety. It was noted in the first component that anxiety in Sites B and D was due to parental pressures. According to the data collected from the "Test Anxiety Scale," (Appendix B) almost three-fourths of the students from these two sites expressed that they almost always or always were concerned about their parents' reactions to a failed test. Whereas half of the students in Site C were never or almost never concerned about parental test expectations. Our research studies have shown that students do not have the self-perception of performing poorly on a test or exhibiting test anxiety. On the other hand, 80% of the teachers from the four sites that were

surveyed on student test anxiety indicated that students are uncomfortable when taking a test. This was demonstrated to the teachers by comments from the students, absenteeism on the day of a test, disruptive behavior during the test and students becoming ill or crying during testing situations. When looking at self-image, students at Site C show the highest level of concern for tests. Sixty-four percent of the teachers felt that students who do not perform well on a test have a poor self-image. About 50% of the students from Site C felt that when given a test, they will not succeed. Site C also had the largest amount of students who were terribly afraid of taking a test. The data suggest that students from Site C may have a poor self-image as a result of their poor test-taking skills.

CHAPTER 3

THE SOLUTION STRATEGY

Literature Review

Research has shown the value of teaching to the cognitive and physiological needs of students. The teaching of these two components may help a student experience less anxiety during testing. These two facets often affect academic performance in different ways (Williams, 1996). According to Goleman, the intellect is undermined by anxiety. "Anxiety also sabotages academic performance of all kinds: 126 different studies of more than 36,000 people found that the more prone to worries a person is, the poorer the academic performance, no matter how measured - grades on tests, grade point average, or achievement tests" (Goleman, 1995, pp.83-84). Students who do not learn how to manage test anxiety may experience consequences that reach beyond the classroom (Paris, Lawton, Turner, Roth, 1991). Examples could range from scoring low on a college entrance exam to failing a written driver's test. Anxiety may occur among students of all ability levels (Paris, Lawton, Turner, Roth, 1991; Woodin, 1997).

One of the single greatest obstacles to academic learning is excess stress and threat in the school environment. When a student is in a situation where they are not in control and they feel anxiety or threat, their brain may switch to the fight or flight syndrome. Threats may set a defense mechanism into action; and these are behaviors that are great for survival, but lousy for

learning (Jensen, 1998). Because people always have to deal with some threat in life, students need to learn to deal with it, not simply be protected from it (Caine & Caine, 1994). Some ways to overcome threat are teaching stress management techniques and the role of down time, asking for peer support, practicing time management, and developing relationship skills (Jensen, 1998).

Wolfe indicated that performance on memory tasks is related to age. A greater risk of experiencing learning difficulties is most likely to occur in immature learners who have problems with memory tasks. It is not until around age 10 that students begin to demonstrate a more efficient use of memory strategies. Higher-achieving students of all ages are more likely to be able to invent effective learning strategies on their own, while immature students are less likely to do so. Students can be taught to use efficient strategies through modeling and numerous opportunities to practice. Evidence indicated that the classroom plays an important role. Teachers can help students understand how their memories work, can model memory devices, and provide examples for when to use these strategies. When students are given a variety of strategies and taught how to apply them, they are more likely to make better choices about when to use them (Wolfe, 2001).

Teachers can play a role in helping students to reduce their levels of anxiety during testing (Burke, 1999). The following strategies have been suggested in the literature:

- The use of good study skills, such as being familiar with different test formats, reading for main ideas, understanding key terms and definitions and how to create a study plan help to reduce test anxiety (Ban, 1993).
- By encouraging students to use a variety of test taking strategies such as using time efficiently, completing questions most familiar with then returning to unanswered items, and interpreting qualifiers, will help to reduce anxiety (Syncamore & Corey, 1990).

- Meeting biological needs such as healthy eating and sleeping patterns can decrease test anxiety (Scruggs & Mastropieri, 1992).
- Gaining a more positive attitude regarding academics and testing, can help to reduce anxiety (Woodin, 1997).
- Practicing relaxation techniques such as seeking clarification from the instructor, allowing oneself a snack, getting a drink and using muscle relaxation exercises can ease tension in students (The Board of Trustees of the University of Illinois, 1984).

Tension before tests or other important events may also be accompanied by nervousness. A little anxiety can help motivate; however, it becomes a problem when a person lets it interfere with their ability to prepare for and perform on tests (The Board of Trustees of the University of Illinois, 1984). Students whose performance is debilitated by test anxiety need instruction on how to study as well as instruction on effective test-taking skills (Spielberger & Vagg, 1995). Students who tend to be less anxious and perform better on tests have developed intentional thinking strategies. When a student has mastered test-taking skills, they have developed intentional thinking strategies that can be transferred to all test-taking situations. They can verbalize the procedure that will be most beneficial to them (Syncamore, & Corey, 1990). It has been suggested that students who do not know how to prepare for and take tests experience anxiety (Swanson & Howell, 1996). Different types of treatments are needed for test-anxious students with poor study skills. Reducing test anxiety appears to improve academic performance if students are encouraged to use and enhance the study skills they possess. Studies have shown that study skills training alone may not be effective in reducing test anxiety, but when combined with other treatments, it has a positive impact. A two-stage treatment program would seem to produce the best long-term results. The first stage should focus on reducing test anxiety during

exams and helping students use their existing coping skills more effectively. The second stage would then focus on improving study skills and test-taking skills so that students would not find themselves overwhelmed with anxiety that would interfere with test performance (Spielberger & Vagg, 1995). However, there are some experts that are currently undecided over whether test anxiety has an impact in student performance (McDonald, 2001).

Preparing for the exam is only half the battle of overcoming anxiety during testing. Often basic biological, emotional, and social needs are neglected when students prepare for tests. Biological needs could include proper sleep, diet, and time for recreation while emotional and social needs could include maintaining a positive attitude and participating in relaxing activities such as reading a magazine or newspaper or going for a walk (The Board of Trustees of the University of Illinois, 1984). Research shows that intrapersonal thoughts of test-anxious students tend to be negative and self-defeating. Some students may perceive that others are smarter than they are, that they always mess up on tests, and that the tests have trick questions designed to fail them (Counseling Center, 2000). Students' attitudes toward testing may be affected by exposing them to a wide variety of methodologies. What is challenging for one student may not be for another. Therefore, it is important to offer options to the students regarding the complexity or type of projects to be completed (Jensen, 1998). By choosing the method of study and preparation for a test, they should be more successful. Students who are able to harness their emotions can use their anxiety as motivation to prepare well for a test, thereby doing well on the test (Goleman, 1995).

Project Objectives and Processes

As a result of increased emphasis on study skill strategies during the period of September 2001 to January 2002, the seventh, eighth, and ninth grade students from the targeted research

classrooms will learn ways to help decrease anxiety while testing, as measured through student achievement.

In order to accomplish the project objective, the following processes are necessary:

1. A variety of materials that will improve study skills will be developed.
2. A series of activities that will model and encourage students to practice positive study skills will be developed.
3. Tools for self-reflection will be constructed.

As a result of increased instructional emphasis on test-taking strategies during the period of September 2001 to January 2002, the seventh, eighth, and ninth grade students from the targeted classes will increase their knowledge of ways to adapt to different modes of assessment.

In order to accomplish the project objective, the following processes are necessary:

1. Gather a variety of different test formats.
2. Develop a series of activities that replicate various test formats.
3. Tools for self-reflection will be constructed.

As a result of increased instructional emphasis on test anxiety during the period of September 2001 to January 2002, the seventh, eighth, and ninth grade students from the targeted classes will increase their ability to use interventions in order to reduce their levels of anxiety during testing.

In order to accomplish the project objective, the following processes are necessary:

1. Materials will be developed that will help teach various interventions pertaining to physical and emotional needs.
2. A series of relaxation activities will be developed.
3. Tools for self-reflection will be developed.

Project Action Plan

The following is the action plan to be administered to approximately 100 students ranging from seventh through ninth grade from four different public schools in a Midwestern urban area. Abilities range from students with individualized education plans (IEP) to students who are considered educationally gifted. Teachers in the targeted classrooms will provide instruction in study skills, test taking strategies, and relaxation techniques. Also participating in this research are additional teachers from the targeted schools who will complete a survey on observed student test anxiety. Interventions will take place over an eighteen-week period commencing September 3, 2001 and concluding February 1, 2002. Throughout the eighteen-week period, a variety of instructional strategies will be implemented weekly in order to reduce test anxiety. Student written responses through surveys and reflections will provide data regarding test anxiety in order to document their successes or failures with this study.

Week 1: Study Skills

I. Administer "Attitude Toward Test Survey" (Scruggs & Mastropieri, 1992) (Appendix A)

II. Begin to implement daily planners

III. Familiarize students with how to use textbook

Week 2: Study Skills

I. Administer Preintervention: "Test Anxiety Scale" (Friedman, & Bendas-Jacobs, 1997) (Appendix B)

II. Teach or review reading strategies

A. Comprehension

B. Finding main idea or details

C. Vocabulary

D. Reading for purpose

E. Review questions

F. Present "Graphic Organizers for Text Structures" (Schoenbach, Greenleaf, Cziko, & Hurwitz, 1999) (Appendix C)

Week 3: Study Skills

I. Note taking skills

A. T-notes

B. Record, Edit, Synthesis, Think (REST) (Lenski, Wham, & Johns, 1999) (Appendix D)

C. Outlining

D. Graphic organizers

II. Time Management skills

A. Teaching

B. Student monitoring (Lenski, Wham, & Johns, 1999)

1. Tips for Managing Study Time (Appendix E)

2. Study Skills Self-Assessment (Appendix F)

Weeks 4,5, & 6: Test-taking Skills

I. Test Format (Lenski, Wham, & Johns, 1999)

A. Objective tests "Studying Test Formats" (Appendix G)

1. True or false

2. Multiple choice

3. Matching

4. Cloze

5. Completion

B. Essay tests

C. Student Monitoring

1. "Test Preparation Plan Checklist" (Appendix H)

2. "Test Preparation Checklist" (Appendix I)

II. Taking the test "Ways to Enhance Your Ability to Take a Test" (Appendix J)

A. Physical needs

B. Receiving the test

C. Test completion

III. Administer "Teacher Survey for Observed Test Anxiety" (Appendix K)

Week 7: Relaxation techniques

I. Physical relaxation

II. Mental relaxation

Week 8: Testing

I. Survey on Test Readiness (Appendix L)

II. Survey on Test-taking Strategies (Appendix M)

Weeks 9, 10, 11, 12 & 13: Review interventions and checklists

Week14: Testing

I. Survey on Test Readiness (Appendix L)

II. Survey on Test-taking Strategies (Appendix M)

Week 15: Posintervention: "Test Anxiety Scale" (Appendix B)

Week 16 & 17: Student discussion and reflection

Week 18: Wrap up

Methods of Assessment

In order to assess the effects of the intervention, to improve study and test taking skills, and to decrease anxiety during testing, authentic and alternative assessments were developed. These methods included surveys of teachers and students, scales completed by students, and teacher observations. The surveys and scales that were administered gave participants a chance to express their feelings and observations toward how students approached testing and reacted during a test. A Lickert scale was used to record responses. Surveys were given to all teachers at three of the targeted schools and to teachers of freshmen at the fourth site. Students completed surveys at the beginning of the study, September, 2001, and at the end of the study, January, 2002. Discussion and reflections with the students as to their reaction regarding study skills, test preparation, and relaxation aided in the assessment process.

CHAPTER 4

PROJECT RESULTS

Historical Description of the Intervention

The objective of this project was to reduce anxiety during testing. Accomplishing this goal was done by implementation of the following: practicing good study skills, knowing good test-taking strategies, improving organizational skills, and understanding the importance of good physical health and positive self-esteem. These strategies were selected to affect the desired changes.

All of the research sites followed the original plan that called for administering the research project to approximately 100 students ranging from seventh through ninth grade in four different public schools. Student absenteeism, lack of parental permission forms, and student mobility resulted in only 68 participating in the research for the full eighteen weeks. Students' ability levels ranged from those with Individualized Education Plans (IEP) to those who were considered educationally gifted. Interventions were to take place over an eighteen-week period on a weekly basis. External forces caused some sites to slightly modify their schedules. During the research, a variety of instructional strategies were implemented in order to reduce test anxiety. Documentation of students' successes or failures was recorded using surveys and

reflections. Teachers were also given the "Teacher Survey for Observed Test Anxiety" (Appendix K).

Prior to intervention, students were administered an "Attitude Toward Test Survey," adopted from Scruggs and Mastropieri (Appendix A), and the "Test Anxiety Scale" (Appendix B), adopted from "Friedben Test Anxiety Scale." At the beginning of the intervention, each researcher focused on helping students to improve study skills. Students were instructed on use of daily planners, and familiarized with how to use the textbook. They were taught to use various reading strategies. Some of the strategies presented to the students included: comprehension, finding main idea or details, vocabulary, reading for purpose, review questions, and the introduction of "Graphic Organizers for Text Structures" (Appendix C). Other study skills taught included note- taking skills and time management skills. Within instruction regarding note-taking skills, the students were taught: T-notes, "Record, Edit, Synthesis, Think (REST)" (Appendix D), outlining, and graphic organizers (Appendix C). When teaching time management, tips for organizing study time were presented (Appendix E). Students were also taught to use self-monitoring techniques by using "Study Skills Self-Assessment" (Appendix F) a "Test Preparation Plan Checklist" (Appendix H), and a "Test Preparation Checklist" (Appendix I)

As the next part of the intervention, the researchers focused on teaching test- taking skills. The students were given a tri-fold pamphlet, "Studying Test Formats," (Appendix G) that provided information about objective and essay tests. Another pamphlet, "Ways to Enhance Your Ability to Take a Test," (Appendix J) was reviewed. The brochure dealt with the importance of physical needs prior to and during testing, test- taking strategies and test completion. Students were encouraged to refer to these pamphlets during the intervention.

After the interventions had been taught and discussed, content tests were administered. Immediately preceding these tests, the students completed the "Survey on Test Readiness" (Appendix L). At the conclusion of the tests, the students completed the "Survey on Test Taking Strategies" (Appendix M). For the next several weeks, a review of the interventions and checklists continued. Once the review was completed, the two survey assessments were re-administered.

After the intervention was completed, the "Test Anxiety Scale" (Appendix B) was administered. A student discussion was held in regard to study skills, test-taking strategies, and relaxation techniques that were taught during the eighteen-week intervention. The teacher researchers kept anecdotal records in their journals from the discussions. Students were encouraged to reflect on the areas that were most helpful to them and how the project could be changed to be more beneficial in the future.

Presentation and Analysis of Results

At the completion of the intervention, students at all four sites completed the "Test Anxiety Scale" (Appendix B). Two fewer students completed this assessment because they had moved from the testing site. This same assessment was given at the beginning of the eighteen-week intervention.

The teachers administered the "Test Anxiety Scale" (Appendix B) as a posttest measure to each student in the targeted groups. Students were asked to evaluate their responses in the three categories based on a Lickert Scale. A response indicated the student never, almost never, almost always, and always felt this anxiety. The researchers included data from the selected statements shown in the following table because much of the intervention dealt with cognitive

and emotional behaviors before, during, and after testing. These statements summarized how students viewed self-esteem, behavior during testing, and physical and mental anxiety.

Table 3

Test Anxiety Scale

	Never		Almost Never		Almost Always		Always	
Statement	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest
Areas of Self-esteem:								
Statement 5 – What will my teacher think?	34%	35%	40%	43%	21%	16%	5%	6%
Statement 6 – Will my friends score higher?	31%	31%	49%	47%	13%	18%	7%	4%
Statement 8 – What will my parents think?	20%	22%	17%	15%	31%	31%	33%	34%
Statement 13 – I feel I just can't make it on the test.	34%	38%	41%	37%	19%	15%	6%	10%
Feelings During Testing:								
Statement 9 – My thoughts are clear.	7%	12%	20%	10%	50%	53%	23%	19%
Statement 11 – My chances are good to do well.	6%	9%	24%	18%	46%	53%	24%	28%
Statement 15 – It is hard to organize my thoughts	23%	31%	41%	34%	30%	28%	6%	9%
Student Observed Physical and Mental Anxiety:								
Statement 18 – I am tense during a test.	17%	22%	29%	34%	37%	34 %	17%	10%
Statement 19 – My hard pounds strongly during a test	29%	27%	23%	32%	27%	25%	21%	16%
Statement 21 – I am terribly scared of tests	55%	46%	23%	35%	11 %	7%	11%	12%
Statement 22 – I move excessively in my seat during a test	36%	40%	37%	37%	16%	16%	11%	7%

After reviewing the pre- and postest figures from the "Test Anxiety Scale" (Appendix B) the researchers noted that there was not a meaningful change in student responses. In the area of self-esteem, the most noticeable change occurred in Statement 5 (Table 3) "I am very worried about what my teacher will think or do if I fail his or her test." After the intervention, students demonstrated that they are less anxious about how their teacher will respond to a low test score. Due to the time period of the postest, at the end of the semester, many student responses did not show a noteworthy change for the other statements in this portion of the survey. Statements dealt with how they, their friends, and their parents would perceive low test scores. Possible factors that could have affected these responses were the end of the first semester, difficulty of the material, and more parental pressure due to retention notices.

The second portion of the anxiety scale reviewed by the researchers dealt with how students felt during testing. The chosen three statements contained information where students evaluated their ability to organize thoughts during a test. A small change occurred in Statement 9 (Table 3) "During a test my thoughts are clear and I neatly answer all questions." Data from the posttest showed that the 4% of students felt that the clarity and organization of their thoughts increased during a test. The most considerable change in this section from the pretest came from Statement 11 (Table 3) where there was a 14% increase in students who felt that their chances were good to think and perform well on tests.

The last area of data collected, shown in Table 3 was based on physical and mental behaviors during a test. The most noteworthy increase in student response was the reduction of tenseness when students felt prepared to take a test. Twenty percent of the students were experiencing less anxiety than they were at the beginning of the intervention. Small gains were shown in Statements 21 and 22. There was a 6% increase from the pretest data that the majority

of students did not feel terribly scared of tests. Most student responses indicated that uneasy student movement decreased during a test.

Conclusions and Recommendations

Researchers from all four sites believe that students experience anxiety when taking tests due to the lack of organizational skills, poor study skills, and ineffective test-taking strategies. Although the sites used the same interventions, we found students' needs to be slightly different because of the range in ability levels; therefore, recommendations may vary.

Site A

Students at Site A expressed that the organizational strategies helped them the most. However, the targeted students did not appear to show a continued effort to improve their organizational skills, study skills, or test-taking strategies learned during the intervention.

Organizational skills, study skills, and effective test-taking strategies should be an ongoing process that students encounter every year in school. My recommendations are that these skills be taught in a scope and sequence throughout the grade levels.

Consistency is also a major issue. At Site A, students travel to different classrooms for instruction. Since the intervention was only administered in one room, it was not consistently applied throughout the day. If teachers could work together as a team, perhaps the intervention would be more effective.

Future research in the area of organizational skills, study skills, and effective test-taking strategies should be conducted over a longer time period. After the intervention, one student specifically expressed that she felt more organized but was still somewhat anxious in taking tests. In the middle school setting, there are often interruptions to the normal school day

including assemblies and other changes in daily schedules, therefore making it necessary to build in more flex time to the action plan being administered.

Site B

Students at Site B thought the most useful intervention was the test-taking strategies. Learning the different techniques for taking tests was helpful in several different classes. Students commented that anxiety was reduced after the interventions. One drawback the students mentioned was that they got some of the interventions confused because they had several new ideas. A suggestion from this site would also be to limit the number of interventions and focus more on a few ideas with more depth. Some deviations were made to the plan from this site because of external problems such as the September 11th terrorist attack against America, the death of a parent, and unexpected fire drills.

Site C

Students in inclusion classes were not able to move at the pace that had been set forth in the action plan of the project. Presenting the large amount of information that was foreign to many of these students took them out of their comfort zones. Thus, much of the material taught had to be presented in smaller increments, and it often had to be taught many times. Many of these students had never had to organize their materials and make a plan to study; they admitted they did not study. When the class began to work with a graphic organizer, or made an attempt to study in pairs or as a group, use neumonics, create study sheets, or take tests, there were those who needed to be walked daily step by step through the processes taught in the intervention. Each step had to be modeled extensively

Early in the intervention process, students often said they felt little or no anxiety when taking a test. Yet when they began an assessment, they would pout, waste time, wad paper, and fidget with their pencils. After the intervention had been administered, when an assessment was

given, students would readily begin the test. The researcher believed the change in behavior was a result in less anxiety towards the test.

By the end of the eighteen-week intervention, students were becoming more independent when using many of the processes taught. I felt the interventions taught during that time frame were of value. Students are using the techniques, and they, along with other teachers, are noticing improvements when they apply the processes learned. I highly recommend this plan. However, with inclusion students I would move at a much slower pace than had been done during the intervention.

The teaching of Organizational skills, study skills, and effective test-taking strategies should be taught to all students. Having these skills introduced to them in their eighth grade year was not a loss, but it was very late in their educational life for some to try to change old habits. These students showed improvement using these skills during the eighteen-week period of intervention, but if they had been able to begin the process of learning these interventions at a younger age, it may have had more of an impact on their education. These skills should be taught consistently throughout the grade levels by all teachers.

Site D

Site D involved high school students in a gifted curriculum. Recommendations may be slightly different than the other sites. Many of my students felt like they had already been introduced to most of the study skills before this class and thought that it was a waste of time to repeat. In the surveys most said that they did not use the study skills. On the other hand, most students did say that they benefited from the test-taking strategies. Another recommendation would regard the number of graphic organizers that were introduced. I would recommend at this grade level, that more time should be spent on test-taking strategies and just do a simple review

of previously taught study skills. Some students felt that they had "information overload." On the days that we had to do a pretest survey, test, and, posttest survey, there were too many papers to assemble and distribute because there was not enough time in a single period to fill out all the papers. My recommendation would be to use a shorter evaluation with pre- and postsurveys. Another recommendation would be to build in more flex time into our action plan because student presentations sometimes took longer than anticipated which resulted in changing the time table. A recommendation suggested by students and teachers involved giving more answer choices on surveys. Many participants felt that they could not accurately respond, and some students ended up spoiling their surveys by writing different answer choices onto the papers. Using a Lickert scale would have been more effective. Although test anxiety was not as prevalent in gifted students, many made comments that after the intervention, the anxiety they did experience was reduced.

All researchers from the four sites agree that it would be more beneficial to students if the introduction of study skills, organizational skills, and relaxation techniques were taught at an earlier age. If this project were to be done again, the researchers recommend a smaller number of strategies or skills covered in the eighteen-week period. It might also be helpful to measure the impact of skills presented on student achievement. We would suggest consistent formats for surveys to be based on a Lickert scale instead of a yes or no response. Assessments used with pre- and postsurveys should be used with a shorter assessment. The researchers as well as students felt paper overload and rushed due to completing a pre- and postassessment on the same day as a test.

In conclusion, all of the researchers highly endorse this intervention. Students need to be taught organizational skills, study skills and test-taking strategies beginning in the elementary

grades. With these tools, the researchers feel that students will become more successful and experience less anxiety during testing. If this research were to be completed again, we would also recommend using the intervention over a longer period of time and would include data regarding student achievement. With the intervention and these recommendations, we feel that students may develop better self-esteem and have a more positive attitude toward school and test-taking.

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APPENDICES

Appendix A

ATTITUDE TOWARD TESTS SURVEY

DIRECTIONS: Circle the appropriate response.

YES NO 1. Taking a test is my favorite thing to do at school.

YES NO 2. Sometimes I am nervous when I take a test.

YES NO 3. I look forward to taking a test.

YES NO 4. I dislike taking a test when I don't know the answers.

YES NO 5. I wish we had fewer tests.

YES NO 6. Taking a test is always fun.

YES NO 7. I like tests even when I don't know the answers.

YES NO 8. Taking a test is one of the worst things about school.

YES NO 9. I would rather do something else besides take a test.

YES NO 10. I wish we had more tests.

Appendix B

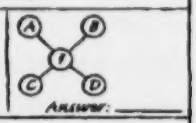
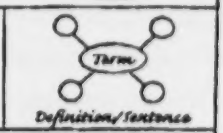
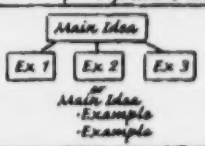
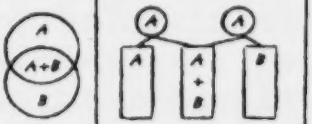
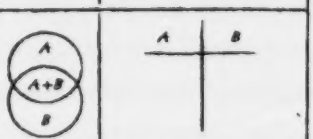
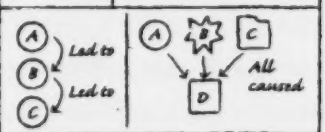
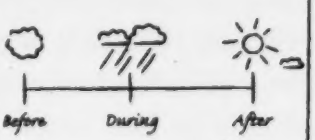
TEST ANXIETY SCALE

DIRECTIONS: Mark an X in the box that best shows your opinion.

	NEVER	ALMOST NEVER	ALMOST ALWAYS	ALWAYS
1. If I fail a test I am afraid I shall be rated as stupid by my friends				
2. If I fail a test I am afraid people will consider me worthless.				
3. If I fail a test I am afraid my teachers will derogate me.				
4. If I fail a test I am afraid my teachers will believe I am hopelessly dumb.				
5. I am very worried about what my teacher will think or do if I fail his or her test.				
6. I am worried that all my friends will get high scores in the test and I will get low ones.				
7. I am worried that failure in tests will embarrass me socially.				
8. I am worried that if I fail a test my parents will not like it.				
9. During a test my thoughts are clear and I neatly answer all questions.				
10. During a test I feel I'm in good shape and that I'm organized.				
11. I feel my chances are good to think and perform well in tests.				
12. I usually function well in tests.				
13. I feel I just can't make it in tests.				
14. In a test I feel like my head is empty, as I have forgotten all I have learned.				
15. During a test it's hard for me to organize what's in my head in an orderly fashion.				
16. I feel it is useless for me to sit for an examination, I shall fail no matter what.				
17. Before a test it is clear to me that I'll fail no matter how well prepared I am.				
18. I am very tense before a test, even if I am well prepared.				
19. While I am taking an important test, I feel that my heart pounds strongly.				
20. During a test my whole body is very tense.				
21. I am terribly scared of tests.				
22. During a test I keep moving uneasily in my chair.				
23. I arrive at a test with a lot of tension or nervousness.				

Appendix C

Graphic Organizers for Text Structures

If You Read ...	You Might Expect to Find ...	You Can Probably Use This Note-Taking Strategy
1. A question	1. An answer, or the information to create an answer	Question: _____ ·Information ·Answer 
2. Colon (:)	2. A list	Main Idea: ·Detail ·Detail ·Detail
3. *Therefore*	3. Results or conclusions	
4. *That is (i.e.)* *In other words* *Consists of* *Is equal to* *Means*	4. A definition	Highlight ·Term ·Key terms ·Definition 
5. *For example (e.g.)* *For instance* *Such as* *is like* *Including* *To illustrate*	5. Examples	 Main Idea ·Example ·Example
6. *Similarly* *In the same way* *Just like* *Just as* *Likewise* *In comparison* *Also*	6. Comparison (how things are similar or the same)	
7. *In contrast* *On the other hand* *However* *Whereas* *But* *Yet*	7. Contrast (how things are different)	
8. *This caused* *An effect of* *Because of* *In response to* *As a result of*	8. A cause-and-effect relationship, or how something happened	
9. *Before* *Preceding* *Prior to* *Previously* *During* *Concurrently* *Following* *After*	9. A sequence of events, timeline, or chronology	

Appendix D

Record-Edit-Synthesize-Think REST

Record-Edit-Synthesize-Think (REST) is a notetaking strategy. When students use REST, they record what they have read or heard, edit those notes by condensing them and deleting irrelevant material, synthesize notes by noting information stressed both in class and in text, and think about the notes while studying and learning the content information. REST can be used before a reading assignment or it can be used with classroom discussion.

DIRECTIONS

1. Tell students that you will be demonstrating a study and notetaking strategy that they can use to learn content material.

2. Identify a concept that will be the topic of a class discussion and will be assigned to students to read. Have students read the passage independently or in groups.

3. Have students record notes from the reading on the left half of paper in a manner similar to the example.

4. After students have recorded notes from their reading, present a lecture or conduct a class discussion about the topic. Tell students to write notes from the lecture or discussion on the right half of the paper as in the example.

5. Tell students that lectures and discussions may repeat information that students have read in their text and written in their notes. Some information will be different. Tell students that both types of notes are important to study. Have students edit their notes and delete information that is redundant or irrelevant.

6. Explain that the next step in REST is to synthesize the information from textbook reading and discussion. Tell students to read both columns of their notes carefully, looking for synthesis between the information from both sources. Have the students write their summary in the bottom of their notes like in the example.

7. REST can also be used as a notetaking strategy when students first hear a lecture or class discussion. Students using REST to take notes from a discussion should record notes on the right half of the sheets of paper. When they edit their notes, they should add questions and notes on the left half of the paper to direct their reading. After reading the text, students should synthesize both sources by writing a summary at the bottom of the page.

High School Science Example

REST

Notes from text (pp. 17–19)	Notes from class
• St. Paul's Island in the Bering Sea near Alaska • 41 sq. miles • 1911—25 reindeer introduced • no predators • 1937—reindeer population increased to 2,000 • by 1950 no more reindeer	• food capacity of island limited • interdependence involves limiting factors • no data on reindeer population in 1941–1942 • carrying capacity—maximum population of a particular species that the habitat can support

Summary

Reindeer were introduced to St. Paul's Island, a small island in the Bering Sea, in 1911. The reindeer population increased for 26 years but then exceeded the carrying capacity of the habitat. Reindeer were extinct by 1950 due to a lack of food.

Based on *Biology: A human approach.* (1997). Dubuque, IA: Kendall/Hunt.

Appendix E

Tips For Managing Study Time

- Study in a comfortable environment with good lighting and minimal distractions.
- Set study goals for each study time. List the goals and estimate the amount of time each study goal will take.
- Determine whether short periods or long periods of study time are best.
- Schedule study time at your best time for learning (e.g., early morning)
- Keep a pen or pencil available when studying to summarize, underline, or write down key notes or ideas.
- Keep a positive attitude during study time. Do not try to rush through studying. Become engaged in learning.
- Use study questions or create self-questions while studying. Keep your mind focused.
- Actively read and study. Monitor your attention to the task.
- Relate what you are studying to your life.
- Compliment yourself for productive study periods.

Based on Risco, V. J., Fairbanks, M. M., & Alvarez, M. C. (1991). Internal factors that influence study. In R.F. Flippo & D. C. Caverly (Eds.), *Teaching reading & study strategies at the college level* (pp. 237 – 293). Newark, DE: International Reading Association.

Appendix F

Study Skills Self-Assessment

	Always		Sometimes		Never
1. I read material more than once if I don't understand it the first time.	5	4	3	2	1
2. I try to identify the most important points as I read.	5	4	3	2	1
3. I preview reading assignments before reading.	5	4	3	2	1
4. I concentrate when I study.	5	4	3	2	1
5. I study with a friend when I think it might help.	5	4	3	2	1
6. I try to "overlearn" material as I study.	5	4	3	2	1
7. I take notes that help me when I study.	5	4	3	2	1
8. I study in an environment that is conducive to learning.	5	4	3	2	1
9. I set goals for each study time.	5	4	3	2	1
10. I underline or take notes as I study.	5	4	3	2	1

Based on Davis, S. J. (1990). Applying content study skills in co-listed reading classrooms. *Journal of Reading,* 33, 277-281

TRUE/FALSE TESTS

True false tests are a quick measure to assess a students knowledge.

Keys for taking a true/false test:

- Read each statement carefully
- Statements that contain the words impossible, never, always, all, more, or nothing are usually false
- Words such as usually, sometimes, seldom, and generally, could indicate the statement is true
- Watch for negatives (not) and the prefix "in", because they can change the meaning of the statement
- If a statement is not completely true then it is false
- All parts of a statement must be true to be marked true
- Assume a statement is true unless it can be proved false
- Never leave a statement unanswered. There is a 50% chance of guessing the correct answer
- Assume statements are straight forward. Do not read too much into them
- Make answers neat

ESSAY TESTS

Some tests ask that essay questions be answered in just a few sentences or they may require one to answer using many paragraphs. As a student, make sure you are aware of what format the teacher is requiring you to use. Essay tests assess how well a student can evaluate, analyze and synthesize the course content.

Seven keys to help prepare for an essay test:

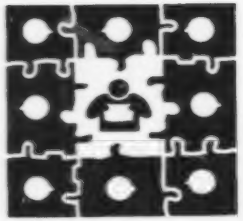
- Be prepared; know the material
- When receiving the test read it over
- Read each question underlining what the teacher is wanting
- Plan your time for writing and rechecking
- If there is a choice of questions choose to write on the one you think you can answer best
- Use simple, clear, concise, direct writing
- Answer to each question by giving examples or reasons of support and explanation

MULTPLE CHOICE TESTS

A multiple choice test is when a student is given a number of choices for each question. This type of test requires the student to be familiar with the material so one can easily recognize the answer.

When taking a multiple choice test:

- Read the stem before reading the choices and try to predict the answer
- Read all choices carefully before deciding the answer
- A response that is only partly correct is probably not the best choice
- Note any negatives and be sure your choice fits the stem
- Eliminate one or more unreasonable choices
- When two or more choices are similar they are probably both incorrect
- If the answer choices do not fit the stem, they are probably incorrect
- If all of the above is a choice, make sure two of the other choices seem appropriate
- Mark difficult questions and come back to them later, maybe another question will give you a clue
- Mark your answers carefully
- Make a calculated guess if you are not sure of the answer



COMPLETION CLOZE TESTS

Answers for this style of test must be recalled from memory. Be sure to study key vocabulary, captions, and details when studying for this test.

Tips to use when taking a completion test:

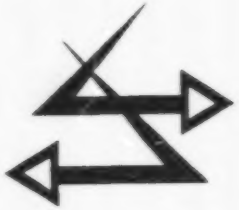
- Read the entire sentence or paragraph containing the blank line
- Use the length of the line as a clue to the answer unless all lines are the same length
- Decide on a word or phrase that best fits
- The word or phrase must fit the sentence grammatically
- Reread the entire sentence or passage after making your choice to see if it makes sense
- When a blank begins a sentence, be sure to capitalize the first word

MATCHING TESTS

A matching test is where students match one column with responses from another column. This type of test requires that you be familiar with material so that when you see it you will easily recall or recognize the answer.

Some tips for taking a matching test are:

- Carefully read all items in both columns before beginning the test
- Begin by matching the items that are easiest for you
- Cross out items as you use them
- Make all matches that you are sure of before guessing at the other matches
- Make the best possible guesses for any blank answers



Appendix H

Test Preparation Plan Checklist for _____test.

☐ I found out when the test was and marked it in my planner.

☐ I know the following about the test:
_____ format T/F MC Essay Opscan
_____ specific information the teacher said would be on a test

_____

_____

_____

_____

☐ I know what to bring the day of the test
pencil pen paper book notebook study guide

calculator other_____

☐ I have gotten all of my assignments, quizzes, and homework that are for this test.

☐ I have corrected or gotten the correct answers for all of my assignments, quizzes, and homework.

☐ I have made a list of specific things I need to study/review . . . ex. vocab., communication process.

☐ I have made a study plan for 10 – 20 minutes each night between the day the test is announced and the day of the test.

☐ I have made a list of names and phone numbers of people I can study/review with or just call for questions.

☐ I have developed a support team . . . a parent, a sibling, aunty, grandparent, or neighbor who will quiz me, remind me to study, make sure I have everything ready the day of the test, will make me a super brain food breakfast, or just wish me luck.

Appendix I

Test Preparation Checklist

Here are some tips to help you organize as you get ready for a test. Answer the questions as honestly as possible. If you are able to answer "yes" to each question, then you are probably ready for the test.

	YES	NO
1. Do I know the type of test I will be taking (multiple-choice, essay, etc.)?	_____	_____
2. Do I know which general and specific areas will be covered?	_____	_____
3. Have I studied a little at a time over several days, not waiting until the last minute?	_____	_____
4. Have I reviewed my notes and readings carefully?	_____	_____
5. Have I looked up key vocabulary words in order to understand them?	_____	_____
6. Do I know bold faced words that are printed in boldfaced or italics in the textbooks?	_____	_____
7. Have I skimmed the chapter headings to recall the overall ideas in each chapter?	_____	_____
8. Can I recall the main ideas listed in the chapter summaries?	_____	_____
9. Have I looked at charts, diagrams, or illustrations for important information?	_____	_____
10. Can I answer the review or study questions at the end of the chapter?	_____	_____
11. Have I thought of some questions that are likely to be on the test, and have I written my answers	_____	_____
12. Do I have the materials I need for the test?	_____	_____

Based on Lenski, S.D. Marnciniec, P.V., & Johns, J. L. (1998). *Study smart and test terrific*, Normal, Il: Illinois Reading Council.

From Susan Davis Lenski, Mary Ann Wham, and Jerry L. Johns, *Reading & Learning Strategies for Middle and High School Students*. Copyright (1-800-228-0810). May be reproduced for noncommercial educational purposes.

METHODS TO HELP RELIEVE ANXIETY

PHYSICAL RELAXATION:

- Sharpen your pencil
- Tense and relax your muscles
- Roll your neck and shrug your shoulders
- Stretch your body
- Take a few deep slow breaths
- Eat a mint or chew a piece of gum

MENTAL RELAXATION:

- Close your eyes and picture a safe relaxing environment
- Place pencil on the desk and try to regroup thoughts
- Try to picture notes or text
- Look around the room (maybe you'll find a clue while trying to calm your nerves)
- Reinforce your positive attitude
- Remind yourself, this is only a test

PREPARING YOURSELF PHYSICALLY FOR THE TEST

- Get a good night's sleep
- Eat a good breakfast
- Keep yourself physically active
- Keep a positive attitude
- Plan study time wisely so you won't have to cram for the test
- Try to avoid caffeine

THE TEST

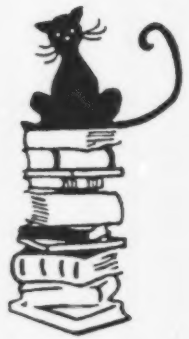
After the you have received the test:

- Read the entire test
- Read the directions twice
- Organize your time wisely
- Remember the strategies learned regarding test formats
- Take your time
- Ask questions if you need clarification
- If you begin to feel anxious, use relaxation techniques

After you have finished the test:

- Is you paper labeled
- Recheck the test
- Make sure answers are written neatly
- Is your paper labeled
- Reflect on your study plan to find what worked and what did not work

WAYS TO ENHANCE YOUR ABILITY TO TAKE A TEST



Many people exhibit some level of anxiety in their lives whether it be before interviewing for a job, moving to a new town, or taking a test. A little nervousness is normal and can help to motivate a person to attempt to do their best. A person who experiences no stress in a new or decisive situation can enter it with a sense of apathy. But when a person becomes overly anxious it can become a problem and can cause him or her to be so overwhelmed that he can not work to his potential.

Becoming anxious over an event can happen for many reasons. One of the main reasons people become nervous before a test is because they have not prepared properly to complete the task they are about to perform. But if a person does prepare and is still overly anxious, then his reaction is not normal.

When you study for a test. . .

Do you read for a purpose by:

- Skimming the text (reading the headings)
- Scan the text (perusing the table of contents)
- Trying to find general ideas
- Specifically try to locate information
- Surveying the text
- Connecting the text to experiences or prior knowledge
- Rereading if necessary
- Outlining what has been read

Do you comprehend what you've studied by:

- Reading slowly and carefully
- Reading the material out loud
- Rereading sections
- Paraphrasing what you have studied
- Looking up unfamiliar words
- Discussing what you have studied with a friend
- Trying to minimize distractions

Do you study main ideas or details by:

- Finding the boldfaced words
- Reading the captions
- Reading the headings
- Highlighting or reviewing the topic sentences

Do you study your vocabulary by:

- Creating flip sheets
- Creating flash cards
- Creating a T chart
- Looking for context clues
- Using neumonics
- Using creative devices (raps, memory games, poetry, games)

Do you review what you have read by:

- Writing notes and questions
- Working and studying the review question throughout and at the end of the chapters
- Reading chapter reviews and summaries
- Using graphic organizers
- Changing the order of what you study

Study/Test Preparation Checklist

1. Do I know the type of test I will be taking?
2. Do I know which general/specific areas will be covered on the test?
3. Have I studied a little over several days and not waited until the last minute?
4. Have I revised notes and reading carefully?
5. Have I looked up and reviewed key vocabulary to have a good understanding of words?
6. Do I know the boldface and italicized words?
7. Have I skimmed chapter headings?
8. Can I recall main ideas from the chapter summaries?
9. Have I studied charts, diagrams, or illustrations for important information?
10. Can I answer the review or study questions at the end of the chapter?
11. Have I thought of questions that may be on the test and studied them or written the answers?
12. Do I have materials ready for the test?

Appendix K

TEACHER SURVEY FOR TEST ANXIETY

Please circle your response and add your comments if you have any.

YES NO 1. Do you feel your students study for tests?

YES NO 2. Do your students come to class prepared the day of the test?

YES NO 3. Have your students ever made comments that let you know they are anxious for a test?

YES NO 4. Have you ever had a student become ill, cry, or show anxiety before or during a test?

YES NO 5. Do you have students who are often absent the day of the test?

YES NO 6. Have you ever had a student become disruptive during a test because they are not prepared or are anxious?

YES NO 7. Do your students have an allotted amount of time to complete a test?

YES NO 8. Do the students know when the test is going to be given?

YES NO 9. Have you been specific about what the test will cover?

YES NO 10. Are your students aware of the testing format (multiple choice, true/false, essay)?

YES NO 11. Do you feel students who are organized do better on a test than students who have problems organizing themselves?

YES NO 12. Do you feel students who do not do well on a test have a poor self-image?

Comments:

Appendix L

SURVEY ON TEST READINESS

DIRECTIONS: Circle the appropriate response.

YES NO 1. Did you find out what information would be covered on the test?

YES NO 2. Did you create a study plan in preparation for the test?

YES NO 3. Did you cram for the test?

YES NO 4. Did you use the strategies for studying that were discussed in class?

YES NO 5. Did you have someone help you study?

YES NO 6. Did you get a good nights rest?

YES NO 7. Did you eat breakfast the morning of the test?

YES NO 8. Do you have a positive attitude going into the test?

YES NO 9. Do you feel prepared for the test?

YES NO 10. Do you feel relaxed?

Appendix M

SURVEY ON TEST TAKING STRATEGIES

DIRECTIONS: Circle the appropriate response.

YES NO 1. Did you look over the whole test?

YES NO 2. Did you read the instructions thoroughly?

YES NO 3. Did you start with the easiest question first?

YES NO 4. Did you organize your time accordingly?

YES NO 5. Did you utilize the specific techniques for the different types of questions?

YES NO 6. Did you look for key words in each question?

YES NO 7. Did you complete the test?

YES NO 8. When finished with the test, did you check your answers?

YES NO 9. Did you skip any answers that you didn't know immediately?

YES NO 10. At any point during the test, did you feel anxious?

YES NO 11. Did you feel the relaxation techniques were helpful during the test?

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